



## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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In re Application of

Kazunobu KATOH

Confirmation No.: 8915

Serial No. 09/955,029

Group Art Unit: 1752

Filed: September 19, 2001

Examiner: Chea, Thorl

For: PHOTOTHERMOGRAPHIC MATERIAL

DECLARATION UNDER 37 CFR 1.132

Honorable Commissioner of Patents and Trademarks,  
Washington, D.C. 20231

Sir:

I, Shoji YASUDA, a Japanese citizen, working at No.210, Nakanuma Minami-ashigara-shi, Kanagawa 250-0123 Japan, hereby declare and state that I received a Master's Degree from Chiba University, the department of Engineering, in March of 1988, and I was employed by Fuji Photo Film Co., Ltd. in April of 1988, and since that time I have been principally engaged in research and development of photosensitive materials for printing at Ashigara Laboratories of the company.

I declare further that I have read all of the documents contained in the file wrapper of the above-entitled application.

I declare further that the test described below was conducted at my direction and under my supervision and the test results are true and correct to the best of my knowledge.

METHOD AND RESULTS

Photothermographic material (sample C) was prepared and evaluated in the same manner as described in Example 1 except that D-sorbitol, which is a heat-fusible solvent satisfying the condition set forth in Claim 1, was added in the intermediate layer instead of the image forming layer. Results are shown in the following table. Sample A and sample 1 in the table are identical to those shown in the present specification.

Table 1

Sample No.	119°C, 10 sec.		119°C, 15 sec.		119°C, 20 sec.	
	Dmin	Dmax	Dmin	Dmax	Dmin	Dmax
A (Comparative)	0.10	0.48	0.10	1.20	0.12	1.46
1 (Invention)	0.10	1.02	0.10	1.44	0.12	1.50
C (Comparative)	0.12	0.98	0.20	1.42	0.56	1.49

DISCUSSION

The data in table 1 above indicates that the photothermographic material containing no heat-fusible solvent exhibits lower Dmax (sample A) and the photothermographic material containing the heat-fusible solvent in the image forming layer exhibits higher Dmin (sample C). The photothermographic material containing the heat-fusible solvent in the intermediate layer containing a hydrophobic and thermoplastic organic binder shows low Dmin and high developing speed (sample 1). It is clearly proved that the claimed photothermographic material containing the heat-fusible solvent in a layer other than the image forming layer is much superior to the photothermographic material containing the heat-fusible solvent in the image forming layer.

Claims 1-18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over the combination of EP '764, Deroover '263 and Komamura '698.

EP '764 fails to disclose heat-fusible solvents.

Deroover '263 merely mentions that heat-fusible solvent may be used in the recording layer (column 11, lines 1-13) but is silent of incorporation of the heat-fusible solvent into other layers. The heat-fusible solvent of the present invention has been defined as being selected from urea derivatives, amide derivatives, sulfonamide derivatives, polyhydric alcohols and polyethylene glycols. Deroover '263 does not refer to these compounds.

Komamura '698 generally states that a variety of heat-fusible solvents may be incorporated in various layers of a photothermographic material (column 22, line 61 to column 23, line 31). Komamura '698 describes the only one working example using a heat-fusible solvent in which a heat-fusible solvent (compound unspecified) and gelatin are contained in the image forming layer. Since gelatin is not a hydrophobic and thermoplastic organic binder, the only one working example dissatisfies the condition of Claim 1 in the present application.

We believe that no one skilled in the art reading there documents would have been motivated to select the claimed compounds among numerous heat-fusible solvents and use them in combination with a hydrophobic and thermoplastic organic binder in a layer other than the image forming layer, before the present invention was made. In case a person skilled in the art had happened to consider using the claimed heat-fusible solvents in a photothermographic material, he could not have predicted that a photothermographic material containing the heat-fusible solvent in a layer other than the image forming layer is much superior to that containing the heat-fusible solvent in the image forming layer.

Thus, the present invention is not obvious over the combination of EP '764, Deroover '263 and Komamura '698.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with

the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application of any patent issuing thereon.

Dated this 31 th day October, 2003.

Shoji Yasuda  
Shoji YASUDA